

US006389740B2

(12) United States Patent Perich et al.

(10) Patent No.: US 6,389,740 B2

(45) **Date of Patent:** *May 21, 2002

(54) LETHAL MOSQUITO BREEDING CONTAINER

(75) Inventors: Michael J. Perich, Frederick; Brian C. Zeichner, Forest Hill, both of MD (US)

(73) Assignee: The United States of America as represented by the Secretary of the

Army, Washington, DC (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35

U.S.C. 154(b) by 0 days.

This patent is subject to a terminal disclaimer.

(21) Appl. No.: **09/725,085**

(22) Filed: Nov. 29, 2000

Related U.S. Application Data

- (60) Division of application No. 09/391,044, filed on Sep. 7, 1999, now Pat. No. 6,185,861, which is a continuation-in-part of application No. 08/965,518, filed on Nov. 6, 1997, now Pat. No. 5,983,557.
- (51) Int. Cl.⁷ A01M 1/20
- (52) **U.S. Cl.** **43/131**; 43/132.1; 424/409; 424/413; 424/416

(56) References Cited

U.S. PATENT DOCUMENTS

794,637 A	7/1905	Park et al.
1,577,351 A	3/1926	Alvarez
1,714,666 A	5/1929	Gring
1,831,476 A	11/1931	Bennett
1,936,644 A	11/1933	Schroder
1,974,549 A	9/1934	Spencer et al

(List continued on next page.)

FOREIGN PATENT DOCUMENTS

GB	2080686	2/1982
JP	403206836	9/1991
JP	404179426	6/1992
RU	2011343	4/1994

OTHER PUBLICATIONS

Obaldia, "Aedes aegypti resting preference on untreated and deltamethrin-treated crepe paper and plastic foam surfaces," *J. of the Amer. Mosquito Control Assoc.*, Mosquito Vector Symposium, 12/3:467–468 (Dep. 1996).

Ikeshoji, "Surfactants for a mosquito trap," Jap. J. Sanit. Zool., 28/4:451–452 (1977).

Lok, "An autocidal ovitrap for the control and possible eradication of *Aedes Aegypti*," *Southeast Asian J. Trop. Med. Pub. Hlth.*, 8/1:56–62 (Mar. 1977).

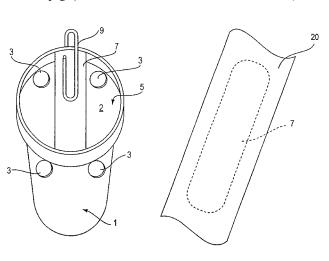
Primary Examiner—Darren W. Ark (74) Attorney, Agent, or Firm—Elizabeth Arwine

(57) ABSTRACT

Provided is a breeding container which is adapted to be lethal to container breeding mosquitoes which contains:

- a walled structure defining an internal volume, the walled structure being constructed and arranged to contain an aqueous liquid within at least a portion of the internal volume:
- at least one opening in the walled structure disposed so as to allow mosquitoes to enter the walled structure;
- mosquito egg laying structure in the internal volume constructed and arranged such that female mosquitoes contact a surface of the mosquito egg laying structure; and
- an insecticide that is lethal to mosquitoes present in an amount sufficient to kill the female mosquitoes in contact with the surface. Also provided is a lethal mosquito breeding container kit and a method for controlling the population of container breeding mosquitoes.

13 Claims, 5 Drawing Sheets



^{*} cited by examiner